

AMENDMENT UNDER 37 C.F.R. § 1.111  
U.S. Application No. 10/728,777

**REMARKS**

Claims 1-50 were pending when the Application was examined. Claims 21 and 45 are canceled. Claims 1, 10, 22, 24, 25, 34, 46 and 49 are amended. Claims 1-20, 22-44 and 46-50 are now pending, of which claims 1, 10, 25 and 49 are independent

The Examiner objected to claim 24 for including two periods. Claim 24 is being amended to correct the typographical error. Please note that the correction to claim 24 is the removal of the period that appeared at the end of the equation. As such, the brackets "[[.]]" appearing in the equation of claim 24 signify removal of the period and are not part of the equation.

**Allowable Subject Matter**

The Examiner has found claims 10-23 allowable but has objected to them as being dependent on a rejected base claim. (Office action, p. 8.)

Allowable claim 10 is amended to include the elements of independent claim 1 from which it directly depends. Claims 11-20 depend from claims 10 either directly or indirectly. Applicants submit that claims 10-20 are now in condition for allowance and withdrawal of the objection and allowance of these claims are requested.

Allowable claim 21 is canceled and claim 22 is amended to depend from claim 1 such that claims 22-23 now depend from claim 1, directly or indirectly.

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**Claim Rejections – 35 U.S.C. § 101**

Claims 25-48 are rejected under 35 U.S.C. § 101 because, according to the Office action, these claims are directed to non-statutory subject matter. (Office action, pp. 2-3.) The Examiner has suggested amending the claims to embody the program on “computer-readable medium encoded with a computer program.” (Id.)

Independent claim 25 is being amended to include “A storage medium storing a set of program instructions executable on a data processing device and usable to summarize a stream of ordered information ... wherein the storage medium is a computer-readable medium.” (Emphasis added.) Support for this amendment may be found throughout the specification and drawings and, for example, in figure 8 and in paragraphs [0102] and [0103] of the specification as filed, corresponding to paragraphs [0117] and [0118] of the published Patent Application Publication.

For example, paragraph [0102] of the specification teaches “It should be understood that various embodiments of the media summarizing system 600 can be implemented as software stored on a computer readable medium that is executable on a programmed general purpose computer, a special purpose computer, a microprocessor or the like. Such a computer readable medium includes using a carrier wave or the like to provide the software instructions to a processing device. It should also be understood that each of the circuits, routines, applications, managers, procedures, objects or the like shown in FIG. 8 can be implemented as portions of a suitably programmed general-purpose computer....” (Emphasis added.) This paragraph includes

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“carrier waves” as one type of the “computer readable medium” but does not define or limit the “computer readable medium” to “carrier waves” alone.

Claim 25, that is amended as suggested by the Examiner, overcomes the rejection. Withdrawal of the 35 U.S.C. § 101 rejection of this claim is requested.

Claims 26-48 directly or indirectly depend on claim 25 and were rejected under 35 U.S.C. § 101 for inheriting the rejection of claim 25. The alleged deficiency of the independent claim 25 is now remedied. Withdrawal of the 35 U.S.C. § 101 rejection of these claims is also requested.

#### **Claim Rejections – 35 U.S.C. § 103**

Claims 1-2, 4, 6, 8-9, 25-26, 28, 30, 32-33 and 49-50 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Gong et al. (U.S. Patent No. 7,151,852). Claims 3, 5, 7, 27, 29 and 31 are rejected under 35 U.S.C. § 103(a) as being obvious over Gong in view of Xu (U.S. Patent Application Publication 2006/0065102).

Claim 1 is amended to include “decomposing the similarity matrix into a plurality of component matrices using non-negative matrix factorization.” (Emphasis added.) Applicants submit that, according to the allowance granted to the now-canceled claim 21 by the Examiner, claim 1 is in condition for allowance. Withdrawal of the obviousness rejection of claim 1 and allowance of this claim are requested.

Claims 2-9 and 22-23 depend from allowable claim 1 and are in condition for allowance. Withdrawal of the rejection and allowance of claims 1-9 and 22-23 are requested.

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Claim 25 is amended to include “instructions for decomposing the similarity matrix into a plurality of component matrices using non-negative matrix factorization.” (Emphasis added.) Applicants submit that claim 25 is in condition for allowance.

Claims 26-44 and 46-48 depend from allowable claim 25 and are in condition for allowance. Withdrawal of the rejection and allowance of claims 25-44 and 46-48 are requested.

Claim 49 is amended to include “a probabilistic decomposition circuit, routine or application that decomposes the similarity matrix into a plurality of component matrices using non-negative matrix factorization.” (Emphasis added.) Applicants submit that claim 49 is in condition for allowance.

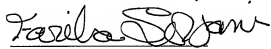
Claim 50 depends from claim 49 and is allowable at least for its dependence from an allowable base claim. Withdrawal of the obviousness rejection of claims 49 and 50 and allowance of these claims are requested.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Fariba Sirjani', is written over a horizontal line.

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